emissions. The supplemental two-diurnal test sequence is designed to verify that vehicles sufficiently purge their evaporative canisters during the exhaust emission test. Sections 86.132–96, 86.133–96 and 86.138–96 describe the separate specifications of the supplemental two-diurnal test sequence.

(2) *Gaseous-fueled vehicles.* The test sequence shown in figure B96–10 shows the steps encountered as the test vehicle undergoes the procedures subsequently described to determine conformity with the standards set forth, with the exception that the fuel drain and fill and precondition canister steps are not required for gaseous-fueled vehicles. In addition, the supplemental two-diurnal test and the running loss test are not required.

(b) The vehicle test for fuel spitback during fuel dispensing is conducted as a stand-alone test (see § 86.146). This test is not required for gaseous-fueled vehicles.

(c) Ambient temperature levels encountered by the test vehicle shall be not less than 68 °F nor more than 86 °F, unless otherwise specified. If a different ambient temperature is specified for soaking the vehicle, the soak period may be interrupted once for up to 10 minutes to transport the vehicle from one soak area to another, provided the ambient temperature experienced by the vehicle is never below 68 °F. The temperatures monitored during testing must be representative of those experienced by the test vehicle.

(d) The vehicle shall be approximately level during all phases of the test sequence to prevent abnormal fuel distribution.

(e) The supplemental tests for exhaust emissions related to aggressive driving (US06) and air conditioning (SC03) use are conducted as stand-alone tests as described in §§ 86.158 through 86.160. These tests may be performed in any sequence that maintains the appropriate preconditioning requirements as specified in § 86.132.

(f) If tests are invalidated after collection of emission data from previous test segments, the test may be repeated to collect only those data points needed to complete emission measurements. Compliance with emission standards may be determined by combining emission measurements from different test runs. If any emission measurements are repeated, the new measurements supersede previous values.

[58 FR 16034, Mar. 24, 1993, as amended at 59 FR 48509, Sept. 21, 1994; 60 FR 43893, Aug. 23, 1995; 79 FR 23696, Apr. 28, 2014]

§ 86.131–96 Vehicle preparation.

(a) For gasoline- and methanol-fueled vehicles prepare the fuel tank(s) for recording the temperature of the prescribed test fuel, as described in § 86.107–96(e).

(b) Provide additional fittings and adapters, as required, to accommodate a fuel drain at the lowest point possible in the tank(s) as installed on the vehicle.

(c) For preconditioning that involves loading the evaporative emission canister(s) with butane, provide valving or other means as necessary to allow purging and loading of the canister(s).

(d) For vehicles to be tested for running loss emissions, prepare the fuel tank(s) for measuring and recording the temperature and pressure of the fuel tank as specified in § 86.107–96 (e) and (f). Measurement of vapor temperature is optional during the running loss test. If vapor temperature is not measured, fuel tank pressure need not be measured.

(e) For vehicles to be tested for running loss emissions, prepare the exhaust system by sealing or plugging all detectable sources of exhaust gas leaks. The exhaust system shall be tested or inspected to ensure that detectable exhaust hydrocarbons are not emitted into the running loss enclosure during the running loss test.

(f) For vehicles to be tested for aggressive driving emissions (US06), provide a throttle position sensing signal that is compatible with the test dynamometer. This signal provides the input information that controls dynamometer dynamic inertia weight adjustments (see §§ 86.108–00(b)(2)(ii) and 86.129–00(f)(2)). If a manufacturer chooses not to implement dynamic inertia adjustments for a portion or all of their product line, this requirement is not applicable.

(g) You may disable any AECDs that have been approved solely for emergency vehicle applications under paragraph (4) of the definition of defeat device in § 86.1803. The emission standards do not apply when any of these AECDs are active.

[58 FR 16037, Mar. 24, 1993, as amended at 60 FR 43895, Aug. 23, 1995; 79 FR 23696, Apr. 28, 2014]

§ 86.132–00 Vehicle preconditioning.

Applicability. Section 86.132–96 (a) through (c)(1) and (d) through (m) and paragraph (c)(2) of this section are applicable to FTP and evaporative emission testing. Paragraphs (n) and (o) of this section are applicable to vehicles tested for the SFTP supplemental tests of aggressive driving (US06) and air conditioning (SC03). Section 86.132–00 includes text that specifies requirements that differ from § 86.132–96. Where a paragraph in § 86.132–96 is identical and applicable to § 86.132–00, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.132–96.''

(a)–(c)(1) [Reserved]. For guidance see § 86.132–96.

(c)(2)(i) Once a test vehicle has completed the refueling and vehicle soak steps specified in § 86.132–96 (b) and (c)(1), these steps may be omitted in subsequent testing with the same vehicle and the same fuel specifications, provided the vehicle remains under laboratory ambient temperature conditions for at least 6 hours before starting the next test. In such cases, each subsequent test shall begin with the preconditioning drive specified in § 86.132–96(c)(1). The test vehicle may not be used to set dynamometer horsepower.

(ii) The SFTP test elements of aggressive driving (US06) and air conditioning (SC03) can be run immediately or up to 72 hours after the official FTP and/or evaporative test sequence without refueling provided the vehicle has remained under laboratory ambient temperature conditions. If the time interval exceeds 72 hours or the vehicle leaves the ambient temperature conditions of the laboratory, the manufacturer must repeat the refueling operation.

(d)–(m) [Reserved]. For guidance see § 86.132–96.

(n) *Aggressive Driving Test (US06) Preconditioning.* (1) If the US06 test follows the exhaust emission FTP or evaporative testing, the refueling step may be deleted and the vehicle may be preconditioned using the fuel remaining in the tank (see paragraph (c)(2)(ii) of this section). The test vehicle may be pushed or driven onto the test dynamometer. Acceptable cycles for preconditioning are as follows:

(i) Preconditioning may consist of a 505, 866, highway, US06 or SC03 test cycles.

(ii) [Reserved]

(iii) If a manufacturer has concerns about fuel effects on adaptive memory systems, a manufacturer may precondition a test vehicle on test fuel and the US06 cycle. Upon request from a manufacturer, the administrator will also perform the preconditioning with the US06 cycle.

(iv) The preconditioning cycles for the US06 test schedule are conducted at the same ambient test conditions as the certification US06 test.

(2) Following the preconditioning specified in paragraphs (n)(1)(i), (ii), and (iii) of this section, the test vehicle is returned to idle for one to two minutes before the start of the official US06 test cycle.

(o) *Air Conditioning Test (SC03) Preconditioning.* (1) If the SC03 test follows the exhaust emission FTP or evaporative testing, the refueling step may be deleted and the vehicle may be preconditioned using the fuel remaining in the tank (see paragraph (c)(2)(ii) of this section). The test vehicle may be pushed or driven onto the test dynamometer. Acceptable cycles for preconditioning are as follows:

(i) If the soak period since the last exhaust test element is less than or equal to two hours, preconditioning may consist of a 505, 866, or SC03 test cycles.

(ii) If the soak period since the last exhaust test element is greater than two hours, preconditioning consists of one full Urban Dynamometer Driving Cycle. Manufacturers, at their option, may elect to use the preconditioning in paragraph (o)(1)(i) of this section when the soak period exceeds two hours.